



Air Managers Committee/State Caucus

Regional Haze/WRAP Activity Update
November, 2005

General Status-Emissions and Air Quality Analyses

- The actual 2002 current base year emissions data from major source categories except dust have been sent to the Emissions Data Management System and the Regional Modeling Center.
- The RMC is completing the air quality analyses for each Class I area to determine how emissions are impacting visibility now. This information is used as part of the Attribution of Haze report.
- The emissions, mobile, dust, fire and stationary sources forums are using their 2002 EI's to "grow" projected emissions for a **2018 base-case, using assumed growth factors and on-the-books control measures for each source category.**
- There are still some **questions about the appropriate assumptions for stationary sources-BART or Alternative cap-and-trading.** These will be addressed by the Stationary Sources Joint Forum, through several workgroups. **Air Managers and the Implementation Workgroup will receive frequent updates on this work.**
- **Emissions data for wind-blown dust are still problematic.** States and tribes should look at these results carefully to determine how much weight to give them under a weight-of-evidence approach.
- We are informed by land management agencies that **wildfire emissions should not be assumed to be constant through 2018, as they plan to allow more wildfires to burn under controlled conditions as "wildland fire use."**
- **Some preliminary RMC analyses of the 2018 base case emissions should be completed in December 2005.**
- In early-to-mid 2006, emission reductions from several selected **additional control measures will be modeled for air quality impacts.** States and tribes will then have a basis to choose any additional control measures as needed to complete their reasonable progress demonstrations.

Other related developments are summarized below

WRAP Technical Status Report

The updated November Technical Status report for work from August through October is available. See the status report at:

http://www.wrapair.org/forums/toc/meetings/051104c/0511WRAP_Technical_Status_Report.pdf

Highlights include:

- **Class I area-specific data are available for review, including 5-year averages of the Best and Worst 20% visibility days and glide paths from baseline period averages to EPA default natural conditions.** See this information on the VIEWS website at: <http://vista.cira.colostate.edu/views/>
- **The Emissions Data Management System has been updated with actual 2002 point, area, mobile, and fire emissions.** EDMS will continue to have additional inventory data added over the next several months. Testing of the EDMS for functionality and operational performance will be completed by the end of 2005. **Stay tuned for training opportunities** See the EDMS information portal at: http://wrapedms.org/default_login.asp
- **Fugitive Dust Fine Fraction** analysis report is available. This study **re-estimates the percent fraction of PM2.5 to PM10 emissions.** In general, for a number of fugitive dust source types, **the AP-42 factor has been over-estimating the fine fraction by about a factor of 2.** WRAP is expected to recommend that **EPA use the work of the DEJF on this project to revise the AP-42 emission factors for PM2.5 downward accordingly.**
This work should result in more accurate PM2.5 emissions for modeling and control strategy development.
- **Draft windblown dust emission factors** are now available- There appear to be **large deviations in the data**, so the user should determine whether these emission factor should be used for regional haze planning. This **information should not be used in isolation from other estimates**, but could be factored as part of the weight of evidence technique for planning purposes.
- **The 2000-2004 "typical" Fire Emissions Inventory data is available.** See [Air Sciences Project Page](#) The workplan for this project as well as the **2018 base-year planning fire emissions inventory is at: [Development of 2000-04 Baseline Period and 2018 Projection Year Emission Inventories, Final Work Plan](#)**
- **IMPROVE has released preliminary 2000-04 baseline period monitoring data in October 2005, for use in preparing default glide paths for each Class I area.** QA and finalization of these data for regional haze SIP purposes will be completed by early summer 2006. A presentation of the baseline

period monitoring data and their consequence was made at the November Attribution of Haze meeting, and will be repeated at the January 10-11 Reasonable Progress/SO_x/NO_x workshop.

Attribution of Haze

Progress on development of the Attribution of Haze, Phase II report (AofH), and the Technical Support System (TSS) was reviewed by the AofH workgroup. Included in the review was status of air quality monitoring, emissions and modeling data to be incorporated into the report, several proposed tabular and graphical presentations of the data and continuing development of the web-based TSS.

- As indicated above, much of the current and projected base-case emissions are now being modeled at the Regional Modeling Center
- With recently released 2004 monitoring data, estimated ranges of WRAP region Class I area 2018 visibility indexes needed to demonstrate reasonable progress are as follows:

	00-04 Baseline Visibility	Default Natural Conditions	2018 RFP Reductions Needed
Best Days (range)	1.6 to 9.1 dv	1.7 to 2.9 dv	-0.3* to 1.7 dv
Worst Days (range)	9.9 to 23.5 dv	6.8 to 8.1 dv	0.7 to 3.8 dv

*(*in some cases current visibility is better than target best days)*

- The Regional Modeling Center is recommending using a newer version of the CMAQ model.

Weight of Evidence Methodology discussed

EPA's use of WOE is as supplemental analyses to modeling methods of determining attainment of NAAQS, where attainment is not clearly shown. This involves additional modeling, trends analyses, and other means to estimate an air quality value. For Regional Haze purposes, WoE will involve review of all major factors that affect visibility, including emissions, monitoring data, modeling, trajectory analyses, natural events, etc. Relative weights of all these factors consider relevance and uncertainty, and may not be uniform throughout the WRAP region.

Additional training on Weight of Evidence is part of the scope of work for the Attribution of Haze projects.